

REMARKS

Upon entry of this Amendment, claims 1-26 are all the claims pending in the application.

Claims 1-22 presently stand rejected.

The drawings filed January 7, 2002 have been accepted by the Examiner.

Claims 1-22 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Haartsen (USP 5,743,250) in view of Callaway, Jr. et al. (USP 5,275,500), hereinafter "Callaway".

For the reasons set forth below, Applicant respectfully traverses the rejections and requests favorable disposition of the application.

Argument

In response to the rejection of claims 1-22, Applicant respectfully traverses the rejection at least because the asserted combination of prior art references fails to teach or suggest a slave device that performs the function of the master device for a predetermined time. Additionally, Applicant submits that it would not have been obvious to one of ordinary skill in the art to combine the asserted prior art references, Haartsen and Callaway, in the manner proposed by the Examiner.

In particular, the invention disclosed and claimed in the present application is directed to a wireless communication device and associated method wherein a master device is connected to a plurality of slave devices. According to at least one embodiment, the master device requests that a particular slave device perform a function of a master device for a predetermined amount of time. The original master device that requests transfer of the master responsibility is known

as the “anchored” master and the slave to which the master responsibility is handed to is known as the “dynamic” master.

Haartsen discloses a radio system that uses radio frequency hopping techniques. More particularly, Haartsen discloses a system wherein the time required to establish a piconet amongst several wireless units is decreased. According to Haartsen, a plurality of wireless units within a certain range of each other is identified. Subsequently, a beacon signal is transmitted from one of the identified wireless units, i.e., an anchor unit, and the remaining wireless units lock onto the beacon signal. (Col. 4, lines 1-7). Via the anchor unit all of the other wireless units within the piconet can then communicate with one another. Additional piconets are then created with associated respective anchor units and communication between various piconets is then enabled via certain wireless units that belong to two or may independent piconets. That is, if a particular wireless unit belongs to both a piconet A and a piconet B, then any device belonging to piconet A can communicate with any device belonging to piconet B by sending the communication data first to the anchor unit in piconet A which then sends it to the common unit belonging to both piconet A and piconet B which then sends to the anchor unit in piconet B which then sends it to the destination unit within piconet B. (Col. 9, line 30 through col. 10, line 43).

As recognized by the Examiner, however, Haartsen does not disclose a slave device that performs the function of the master device for a predetermined time. In regard to this recited feature, the Examiner relies on Calloway.

Calloway discloses a wireless communication system wherein slave devices can communicate with each other without intercession of the master. (Col. 1, lines 6-9). As disclosed at column 2, line 65 through column 3, line 11, it is disclosed that a master device can set up several “parked” slave devices that can communicate amongst themselves in a so-called “talk group”. In particular, when certain slave devices are not communicating with the master device using “a first communication resource, or first channel”, these certain slave devices can be parked, and, thus, able to communicate with each other on “a second communication resource, or second channel. (Col. 3, lines 1-6).

Independent claims 1, 7, 13, 17 and 22 each recites, *inter alia*, “requesting through the transceiving portion a certain slave device of the connected slave devices to perform a function of a master device for a predetermined time.” The proposed combination of Haartsen and Calloway does not disclose this feature, however, because contrary to the Examiner’s assertion, the “talk group” disclosed in Calloway does not meet the requirements of the present claims. Specifically, none of the slaves that comprise the “talk group” in Calloway is granted the function of master for a predetermined time. To the contrary, each of the slave units that form a talk group and are, thus, able to communicate with one another over a secondary resource, i.e., channel, remains a slave to the master device and is never granted master status. As disclosed, for example, at column 3, lines 30-38, the master maintains control of the piconet and all respective parked slaves by polling the parked slaves, albeit at a “less frequent interval”, to receive “status reports on the slaves’ independent communication.” Accordingly, the parked slaves in Calloway do not perform the function of a master, as required by the claims. For at

least this reason the proposed combination of Haartsen and Calloway do not teach or suggest all of the features of any of claims 1-22.

Furthermore, in regard to the prior art, the amount of time that the parked slaves communicate with each other is not predetermined. To the contrary, the independent communication between the various parked slaves continues until one of the parked slaves engaged in the communication over the second channel wishes to terminate the communication. Once the communication over the second channel is terminated, the slaves who were engaged in the communication over the secondary channel request the master to unpark them and return them to the first channel. (Col. 4, lines 37-44). Calloway nowhere discloses that the time during which the parked slaves can communicate over the second channel is predetermined. For this additional reason the proposed combination of Haartsen and Calloway do not teach or suggest all of the features of any of claims 1-22.

In regard to independent claim 13, in addition to the reasons set forth above, the claim is patentable over the cited prior art because the proposed combination fails to teach or suggest “sending Piconet information about other slaves devices... to the certain slave device”, i.e., the dynamic master device. Nowhere in Calloway, or Haartsen, and the Examiner points to no location, is it disclosed that a selected slave becomes a temporary master, i.e., performs the function of master for a predetermined time, and receives information about the other slave devices that are connected to the master, i.e., the anchored master, through a piconet. For this additional reason, claims 13-16 are patentable over the proposed combination of Haartsen and Calloway.

In regard to independent claim 22, in addition to the reasons set forth above, the claim is patentable over the cited prior art because the proposed combination fails to teach or suggest a master and a certain slave device where the master device “exchanges data transmission timing with the certain slave device, and sends Piconet information about other slave devices of the connected slave device, and the certain slave device receives the Piconet information about the other slave devices from the master device, and communicates as the temporary master device with the other slave devices for the predetermined time.” Nowhere in Calloway, or Haartsen, and the Examiner points to no location, is a master device disclosed that communicates with a certain slave device, that becomes a temporary master device, and which exchanges data transmission timing with the temporary master device. Further nowhere is it disclosed that the master device sends Piconet information about the other slave devices to the temporary master device. For this additional reason, claim 22 is patentable over the proposed combination of Haartsen and Calloway.

For at least the reasons set forth above, claims 1-22 are patentable over the proposed combination of Haartsen and Calloway and the rejection of claims 1-22 should be withdrawn.

Additionally, the proposed combination of Haartsen and Calloway is improper for §103 purposes. Specifically, the Examiner asserts that it would have been obvious “to apply the technique of Calloway to the communication system of Haartsen in order to control dynamically and efficiently talk groups system created from groups of slave device operating under control of a master device.” The Examiner’s basis for combining the references, however, fails to meet the requirements for a *prima facie* case of obviousness. Here, the Examiner has merely identified a

potential reason why the inventor's in Calloway would have sought to invent their own system, as disclosed in Calloway itself. That is, dynamically and efficiently controlling talk groups created from groups of slave devices being controlled by a master device is precisely what Calloway discloses. A skilled artisan, with both Haartsen and Calloway before him, would not have been motivated to extract the specific teaching in Calloway related to the establishment and control of talk groups, and insert it into the independent teaching Haartsen. There simply would be no reason for such a combination, and the Examiner has not identified any specific reason other than to achieve the invention already disclosed by Calloway.

As discussed above, Haartsen discloses a system in which slave devices can communicate with each other by communicating with common slave devices that also belong to neighboring piconets. Other than to obviate the present claims, the Examiner has not identified any reason why a skilled artisan would exchange the slave-to-slave communication method of Haartsen with the slave-to-slave communication method of Calloway.

For this additional reason, the §103 rejection of claims 1-22 should be withdrawn.

Patentability of New Claims

For additional claim coverage merited by the scope of the invention, Applicant has added new claims 23-26. Applicant submits that the prior art does not disclose, teach, or otherwise suggest the combination of features contained therein.

Conclusion

In view of the foregoing remarks, the application is believed to be in form for immediate allowance with claims **1-26**, and such action is hereby solicited. If any points remain in issue

AMENDMENT UNDER 37 C.F.R. § 1.111
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which the Examiner feels may be best resolved through a personal or telephone interview, he is kindly requested to **contact the undersigned** at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

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